GOVERNMENT OF INDIA
AGRICULTURE
LOK SABHA

UNSTARRED QUESTION NO:2933
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SCHEME TO COMBAT DROUGHT BY ICAR
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Will the Minister of AGRICULTURE be pleased to state:

(a) whether the Indian Council of Agricultural Research (ICAR) have formulated a scheme to combat drought;

(b) if so, the details thereof;

(c) the contingency plan formulated by the ICAR for Rabi season; and

(d) the date on which it is likely to be announced?

Answer

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI HUKUMDEO NARAYAN YADAV)
(a) Yes, Sir.
(b) Three kinds of strategies to combat drought have been formulated. The short term strategies are proposed to moderate the impact of present drought through
(i) ensuring availability of quality fodder to animals for the period from September 2002 to June 2003;
(ii) judicious use of surface and groundwater for drinking and irrigation;
(iii) livestock management including establishment of cattle camps;
(iv) cropping sequences and agronomic practices for drought affected areas and
(v) promotion of subsidiary income and employment generating activities such as mushroom cultivation, bee keeping, sericulture, raising nursery of horticultural species and post harvest handling of products of perennial vegetation naturally existing in drought prone areas.

To negate the impact of such droughts in future, a long term strategy has also been prepared. Various components of this strategy are
(i) increasing availability of good quality water in drought prone areas through inter-river, inter-basin and inter-lake connections,
(ii) ensuring availability of quality fodder through establishment of perennial top feed fodder resources on all kinds of waste/abandoned lands and on field boundaries,
(iii) creation of fodder banks by transporting baled, densified and fortified residues of crops like rice, wheat, maize, mustard etc. from states like Punjab, Haryana and western UP where such residues particularly rice are burnt,
(iv) livestock strategy focusing on upgradation of indigenous livestock, establishment of permanent sites for cattle camps, proper redressal of drought related animal health problems,
(v) exploitation of under-exploited/under utilized plant resources such as edible cactus, Valayati babul etc. and
(vi) creation of alternative income and employment generating opportunities in drought prone areas.

To address the above mentioned drought management framework, following policy issues have been proposed for implementation.
(i) implementation of land use policy focusing on efficient crop zone concept,
(ii) declaration of water as national asset and legal provision for its over and unscientific exploitation for domestic, agricultural and industrial use,
(iii) creation of fodder and seed banks in drought prone areas,
(iv) state level policy for livestock distribution, management and improvement and
(v) policy framework for effective and workable collaboration amongst Research-Development-NGOs-Industry-Farmer.

(c) Specific contingency plan for rabi season has also been prepared. Salient features of this rabi contingent plan are listed below :

1. Contingent crops/cropping sequences/agronomic practices

- Cultivation of toria, taramira and or agarni variety of mustard as catch crops after the receipt of late September rains.

- Mixed sowing of wheat + gram, barley plus gram and strip planting of wheat, mustard and gram in 4:4:4 rows geometry.

- Large scale resorting to zero tillage wheat cultivation in Panjab, Haryana, Western UP.Resorting to bed planting furrow irrigated practices to save on limited irrigation water.

- Cultivation of less water requiring crops and cropping sequences as per contingency plans of respective states. For example, wheat varieties WH 157, WH 283 and Kundan can be cultivated with limited water.

- Resorting to application of locally available mulches for moisture conservation in rainfed regions.

2. Ensuring availability of quality fodder to animals for the period from September 2002 to June 2003 through

- Cultivation of short duration and less water requiring fodder crops like dual purpose barley and oats. Promotion of berseem, lucern, Chinese cabbage, gobhi sarson etc. as fodder crops in assured irrigated parts of drought prone states.

- Stopping burning of paddy residue in Panjab, Haryana, Western UP and its transportation to drought affected areas particularly Rajasthan after proper bailing, densification and fortification etc.

- Promoting use of sugarcane tops, its bi-products such as baggase, molasses, press mud etc. as survival feeding.

- Preparation of urea molasses mineral blocks, feeding tree leaves and pods etc. as a source of supplementary ration.

3. Judicious use of surface and ground water

- Resorting to drip and sprinkler irrigation practices wherever possible and feasible.

- Efficient use of poor quality ground water through mixed/alternate use, cultivation of salt tolerant varieties like CS 52 (mustard) and CSG 8962 (gram), application of gypsum, growing of salt tolerant crops such as Isabgol.

4. Livestock Strategy

- Establishment of cattle camps in assured irrigation part of the drought prone areas.
- Resorting to alternate day watering to camel, sheep and goats and avoiding long distance grazing.
- Animal health check-up in cattle camps and following recommended vaccination schedule.

(d) The contingency plan for rabi was announced in September 2002 during Rabi Meeting held in Vigyan Bhawan.Five hundred copies of the ICAR publication `Drought Management Strategies` were distributed to officials of Department of Agriculture and Cooperation and representatives of all the states and Union Territories. Depending upon local conditions and prevailing drought situations, comprehensive contingent plans have been prepared by all the State Agricultural Universities. These contingent plans are being announced through press/media and by organizing farmers meetings in all the drought prone areas in the country.